LISTING OF THE CLAIMS:

1. – 22. (canceled)

23. (new) A target crossing location estimator for a vehicle comprising:

a first sensor configured to sense an object in a field of view and provide signals of a first range, defined as the distance between the object and the first sensor, and a first range rate thereof;

a second sensor configured to sense the object in the field of view and provide signals of a second range, defined by the distance between the object and the second sensor and a second range rate thereof, The sensors defining a baseline and the field of view being a common field of view for the first and second sensors; and

a processor configured to:

receive a plurality of paired range and range rate signals for the sensed object from the first sensor and a plurality of paired range and range rate signals for the sensed object from the second sensor over a time period;

for each of the received paired range and range rate signals received over the time period, compute a W-plane point representing a square of the range and a square of the product of range and range rate, wherein the W-plane is a two-dimensional Cartesian coordinate system with a first axis representing the square of range and a perpendicular second axis representing the square of the product of range and range rate;

generate a first best-fit W-plane curve from the w-plane points derived from the first sensor and a second best-fit W-plane curve from the W-plane points derived from the second sensor;

calculate a numerical difference between values of the first and second best-fit W-plane curves at a selected value of the square of the product of range and range rate;

derive an estimated target crossing point location along the baseline as a distance from a predetermined point on the baseline, the distance being derived from the numerical difference and a separation distance of the first and second sensors; and

generate a signal based on the estimated crossing point location.

24. (new) The target crossing location estimator as defined in claim 23, wherein the reference point is a midpoint of the baseline between the first and second sensors and the processor is configured to derive the distance as the numerical difference divided by twice the separation distance of the first and second sensors.

25. (new) The target crossing location estimator as defined in claim 23, wherein each of the first and second sensors comprises a radar sensor.

26. (new) The target crossing location estimator as defined in claim 23, wherein the processor is not configured to receive an azimuth angle measurement of the object.

27. (new) The target crossing location estimator as defined in claim 23, wherein the first and second best-fit W-plane curves are constrained to be linear and parallel.

28. (new) A target crossing location estimator for a vehicle comprising:

a first sensor configured to sense an object in a field of view and provide signals of a first range, defined as the distance between the object and the first sensor, and a first range rate thereof;

a second sensor configured to sense the object in the field of view and provide signals of a second range, defined by the distance between the object and the second sensor and a second range rate thereof, the sensors defining a baseline and the field of view being a common field of view for the first and second sensors; and

a processor configured to:

receive a range signal for the sensed object from the first sensor and a range signal for the sensed object from the second sensor;

filter each range signal with a range tracking filter;

calculate a numerical difference between squares of the filtered values of the range signals from the first and second sensors; and

derive an estimated target crossing point location along the baseline as a distance from a predetermined point on the baseline, the distance being derived from the numerical difference and a separation distance of the first and second sensors; and

generate a signal based on the estimated crossing point location.

29. (new) The target crossing location estimator as defined in claim 28, wherein the reference point is a midpoint of the baseline between the first and second sensors and the processor is configured to derive the distance as the numerical difference divided by twice the separation distance of the first and second sensors.

30. (new) The target crossing location estimator as defined in claim 28, wherein each of the first and second sensors comprises a radar sensor.

31. (new) The target crossing location estimator as defined in claim 28, wherein the processor is not configured to receive an azimuth angle measurement of the object.